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David G. Conroy

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CHRISTENSEN, O'CONNOR, JOHNSON, KINDNESS, PLLC
1420 FIFTH AVENUE
SUITE 2800
SEATTLE, WA 98101-2347

EXAMINER

KEEFER, MICHAEL E

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/717,741	Applicant(s) CONROY ET AL.	
	Examiner MICHAEL E. KEEFER	Art Unit 2154	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 November 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is responsive to the Amendment filed 11/08/2007. Claims 1-30 are pending.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 11-15 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim 11, which is directed to a computer readable medium comprising a data structure. This subject matter is not limited to that which falls within a statutory category of invention because it is not limited to a process, machine, manufacture, or a composition of matter. Instead, it includes a data structure. Data structures do not fall within a statutory category since they are clearly not a series of steps or acts to constitute a process, not a mechanical device or combination of mechanical devices to constitute a machine, not a tangible physical article or object which is some form of matter to be a product and constitute a manufacture, and not a composition of two or more substances to constitute a composition of matter.

Claims 12-15, which depend from claim 11 do not correct the deficiencies of claim 11 and thus are rejected for the same.

Claim Rejections - 35 USC § 102

3. Claims 1-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Kuzma (US 5781901).

Regarding **claim 1**, Kuzma discloses:

A networked system, comprising:

a message sender for sending a customizable, tag-based message, which includes a reference to a first buffer; (Fig. 7, steps 701-704, email is a customizable tag-based message, and a url is a reference to a buffer) and a message receiver for receiving the customizable, tag-based message, the message receiver being capable of processing the reference in the customizable, tag-based message to cause either a piece of information stored in the first buffer to transfer to a second buffer or a piece of information stored in the second buffer to transfer to the first buffer. (Fig. 7 step 705-707 discloses a receiver processing the url and retrieving the file from the sender's buffer, inherently moving it to another (second) buffer.)

Regarding **claim 2, as applied to claim 1**, Kuzma discloses:

wherein the customizable, tag- based message includes a body element for containing data, the body element including the reference to the first buffer. (Fig. 6, item 625)

Regarding **claim 3 as applied to claims 1-2**, Kuzma discloses:

wherein the reference includes a uniform resource identifier. (Fig. 6, item 627)

Regarding **claim 4 as applied to claims 1-3**, Kuzma discloses:

wherein the customizable, tag-based message includes a header element for containing control information. (the message must inherently include a header specifying to whom the message is being sent (i.e. control information))

Regarding **claim 5 as applied to claims 1-4**, Kuzma discloses:

wherein the customizable, tag-based message is sent from the message sender to the message receiver via a customizable, tag-based protocol. (http is a customizable, tag-based protocol, Fig. 6, 610 and 620)

Regarding **claim 6**, Kuzma discloses:

A networked system, comprising:

a message sender for sending a customizable, tag-based message, which includes a reference to a first buffer; (Fig. 7, steps 701-704, email is a customizable tag-based message, and a url is a reference to a buffer)

an intermediary for intercepting the customizable, tag-based message; and (an intermediary is disclosed in Col. 8, that an intermediary post office may instead buffer or unbuffer the data as it sees fit based off of network resources available)

a message receiver for receiving the customizable, tag-based message from the intermediary, the message receiver being capable of processing the reference in the customizable, tag-based message to cause either a piece of information in another buffer to transfer to a second buffer or a piece of information stored in the second buffer to transfer to the another buffer. (Fig. 7

step 705-707 discloses a receiver processing the url and retrieving the file from the sender's buffer, inherently moving it to another (second) buffer.)

Regarding **claim 7 as applied to claim 6**, Kuzma discloses:

wherein the customizable, tag- based message includes a header element that contains the reference to the first buffer, the header element further containing an attribute that is associated with the reference to the first buffer. (it is inherent for an http message (Fig. 7) to include a header field that identifies the type of data carried in the http packet.)

Regarding **claim 8 as applied to claims 6-7**, Kuzma discloses:

wherein the customizable, tag- based message includes a body element that uses the attribute to refer to the first buffer. (Fig. 7, URL 627)

Regarding **claim 9 as applied to claims 6-8**, Kuzma discloses:

wherein the intermediary is capable of creating a staging buffer from the customizable, tag-based message, the intermediary being further capable of processing the reference in the customizable, tag-based message to create a staging buffer, and causing either a piece of information stored in the staging buffer to transfer to the first buffer or a piece of information stored in the first buffer to transfer to the staging buffer. (Col. 8 lines 29-46 disclose that the intermediary post office can store an attachment and forward only the email with a link, or retrieve an attachment and forward the full attachment with the email.)

Regarding **claim 10 and as applied to claims 6-9**, Kuzma discloses:

wherein the another buffer of the message receiver is selected from a group consisting of the first buffer and the staging buffer. (it is inherent that the recipient of the email may retrieve the attachment from wherever the link points to, whether that is to a local storage at a sender, or the storage at an intermediary post office.)

Regarding **claim 11**, Kuzma discloses:

A computer-readable medium having a customizable, tag-based data structure stored thereon for use by a networked system to process the act of sending information by reference, the data structure comprising:

a header tag that is indicative of control information, (a header tag is inherent in the HTTP protocol)

the header tag including a service tag that is indicative of a service for representing a buffer, the service tag including a URI attribute that is indicative of a URI of the service representing the buffer and an identifier attribute that is associated with the service tag; and (A service tag (i.e. a request-URI tag is inherent in a http request/response, as is a content-type tag)

a body tag that is indicative of data information, the body tag being capable of using the identifier attribute to refer to service representing the buffer.

Regarding **claim 12 as applied to claim 11**, Kuzma discloses:

further comprising a host tag that is indicative of the host at which the buffer resides. (a host tag is inherent in any IP message (i.e. a to or from field))

Regarding **claim 13 as applied to claim 11**, Kuzma discloses:

further comprising a port tag that is indicative of a network port through which network communication occurs. (a port tag is inherent in any IP message (i.e. a to or from field))

Regarding **claim 14 as applied to claim 11**, Kuzma discloses:

further comprising a contract tag that is indicative of a contract for defining one or more behaviors of the service representing the buffer. (the contract tag is included in the http messages inherently as the encryption and/or compression methods suggested in Col. 14 lines 10-18)

Regarding **claim 15 as applied to claim 11**, Kuzma discloses:

further comprising a steering tag that is indicative of a steering tag associated with a physical address of the buffer and a length tag that is indicative of the length of the buffer. (the steering tag is the URI, and the length of the URI is inherently given in the packet)

Regarding **claim 16**, Kuzma discloses:

A networked system, comprising:

a central processing unit; (this is inherent in a server)

a piece of memory that includes a first buffer; (the location where a file is stored in memory is inherently a buffer) and

a network interface card that is capable of processing a reference in a customizable, tag-based message to cause either a piece of information stored in the first buffer to transfer to another buffer or a piece of information stored in the another buffer to transfer to the first buffer without requiring the central

processing unit to execute copy instructions. (Fig. 7 step 705-707 discloses a receiver processing the url and retrieving the file from the sender's buffer, inherently moving it to another (second) buffer. Lines 30-50 disclose that the attachment is automatically retrieved from the server (i.e. buffer))

Regarding **claim 17 as applied to claim 16**, Kuzma discloses:

further comprising a session service for associating an address of the first buffer with a steering tag created by the network interface card. (This is inherent in the http GET message that is sent to the server that holds the data)

Regarding **claim 18 as applied to claims 16-17**, Kuzma discloses:

further comprising a session manager service for creating the session service and for destroying the session service once the transfer of the piece of information is completed. (it is inherent for an http session to be managed by a session service that creates and destroys the session.)

Regarding **claim 19 as applied to claims 16-18**, Kuzma discloses:

further comprising a sender service for originating the customizable, tag-based message, the sender service invoking the session manager service to initiate the transfer of the information. (the sender service is disclosed in Fig. 7, steps 701-704, email is a customizable tag-based message, and a url is a reference to a buffer)

Regarding **claim 20 as applied to claims 16-19**, Kuzma discloses:

wherein the customizable, tag-based language message associates the steering tag with a URI of the session service. (it is inherent that the URI of the

file would have to be matched with the steering tag in the HTTP get message to retrieve the file.)

Regarding **claims 21 and 26**, Kuzma discloses:

A computer-implemented method for sending by reference in a customizable, tag-based protocol, the computer-implemented method comprising:

preparing a customizable, tag-based message to include a transfer context, the transfer context including a reference to a first buffer for storing a piece of information without having to embed the piece of information in the customizable, tag-based message; and (Fig. 7, steps 701-704, email is a customizable tag-based message, and a url is a reference to a buffer)

sending the customizable, tag-based message to the network. (Fig. 7, 704)

Regarding **claims 22 and 27 as applied to claims 21 and 26** Kuzma discloses:

wherein the act of preparing includes associating a steering tag with an address of a first buffer that is capable of storing the piece of information. (A URL, (Fig. 6, 627) is a steering tag with an address)

Regarding **claims 23 and 28 as applied to claims 21-22 and 26-27**, Kuzma discloses:

wherein the act of preparing includes creating an attribute in the transfer context, which is capable of being used as an indirection in a body element of the

customizable, tag-based message to refer to the first buffer. (The URL 627 is an attribute that is shown in the body of the email which refers to the buffer.)

Regarding **claims 24 and 29 as applied to claims 21-23 and 26-28**, Kuzma discloses:

further comprising an act of intercepting the customizable, tag-based message by an intermediary to create a staging buffer to mediate between two nodes. (an intermediary is disclosed in Col. 8, that an intermediary post office may instead buffer or unbuffer the data as it sees fit based off of network resources available)

Regarding **claims 25 and 30 as applied to claims 21-24 and 26-29**, Kuzma discloses:

further comprising receiving the customizable, tag-based message, the act of receiving processing the reference to cause a transfer of the piece of information to or from the first buffer at one node to or from another buffer at another node without having a central processing unit to execute a copy instruction. (Col. 8 lines 29-46 disclose that the intermediary post office can store an attachment and forward only the email with a link, or retrieve an attachment and forward the full attachment with the email.)

Response to Arguments

4. Applicant's arguments filed 11/8/2007 have been fully considered but they are not persuasive.

First, Applicant argues that claims 11-15 are statutory under 35 U.S.C. 101. The Examiner disagrees. Applicant asserts that because the structure is encoded on a computer readable medium, it is statutory. The Examiner notes that the structure claimed by Applicant is non-functional descriptive material (i.e. merely data with no functionality). Non-functional descriptive material is non-statutory subject matter, even when encoded on a computer readable medium. (The data structure is non-functional as it does not meet the IEEE definition of a data structure. See MPEP 2106.01.)

Second, Applicant argues that Kuzma does not meet the limitation of claim 1 that “the piece of information stored in the second buffer to transfer to the first buffer if the second buffer contains the piece of information to be sent and the first buffer acts as the repository for receiving the piece of information”. The Examiner notes that this limitation is given in the alternative in the independent claims, so Kuzma is not required to disclose this limitation in order to anticipate the claim, and as Kuzma recites the piece of information being transferred from the first buffer into the second buffer, it does not, and cannot meet the limitation of ‘if the second buffer contains the piece of information to be sent’. It does, however meet the limitation that the first buffer contains the piece of information to be sent.

Third, Applicant argues that Kuzma does not disclose “a message receiver for receiving the customizable, tag based message”. The Examiner notes that HTTP -is- a customizable, tag-based message protocol, as it has tags, and tags

can be chosen to be omitted to inserted into a message, furthermore, the data within the message itself is clearly customizable based upon what is being sent. This phrase is very general and broad; if Applicant is intending to limit the claim to XML or SOAP-based messages, the Examiner suggests inserting this language into the claim. 'A customizable, tag-based, message' reads on almost any prior art messaging protocol, such as HTTP (as noted above), MIME e-mails, SIP, etc.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL E. KEEFER whose telephone number is (571)270-1591. The examiner can normally be reached on Monday through Friday 9am-5pm.

Art Unit: 2143

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on (571) 272-1915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MEK 3/28/2008

/Joseph E. Avellino/
Primary Examiner, Art Unit 2143